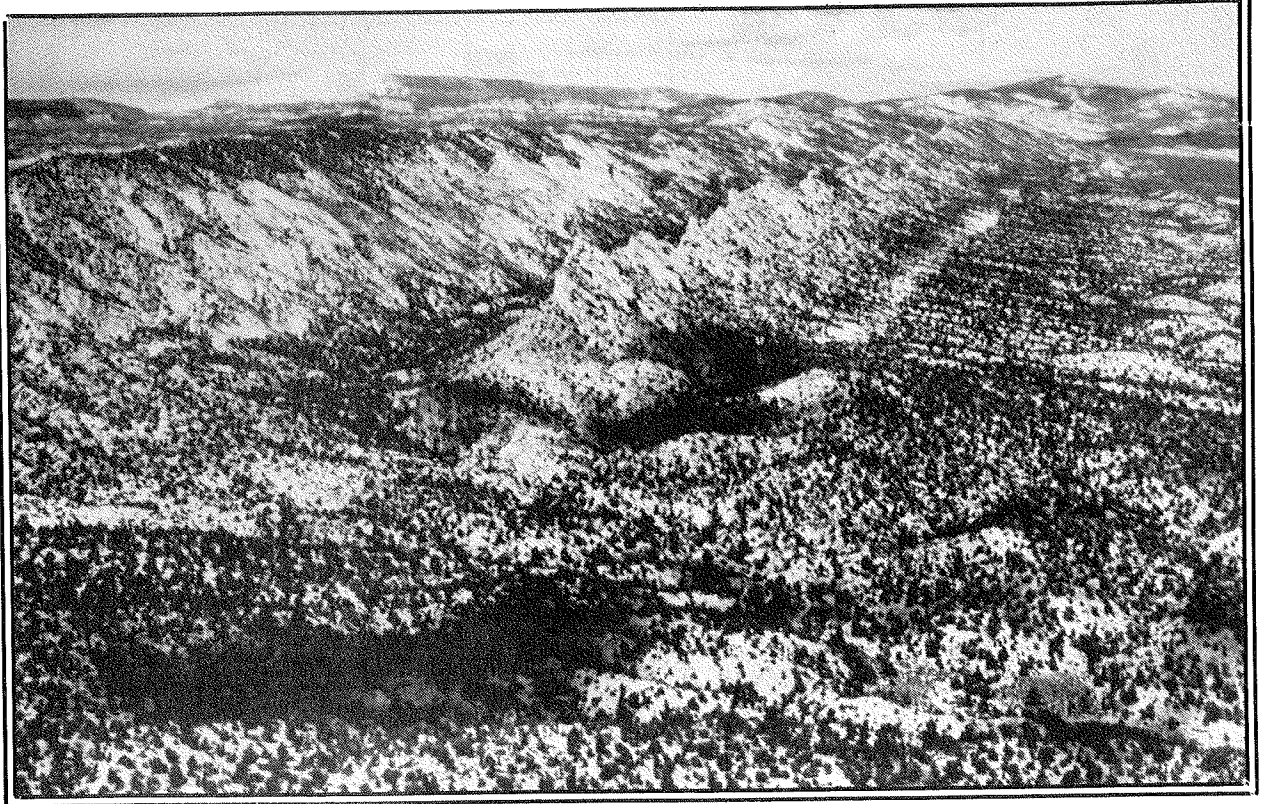


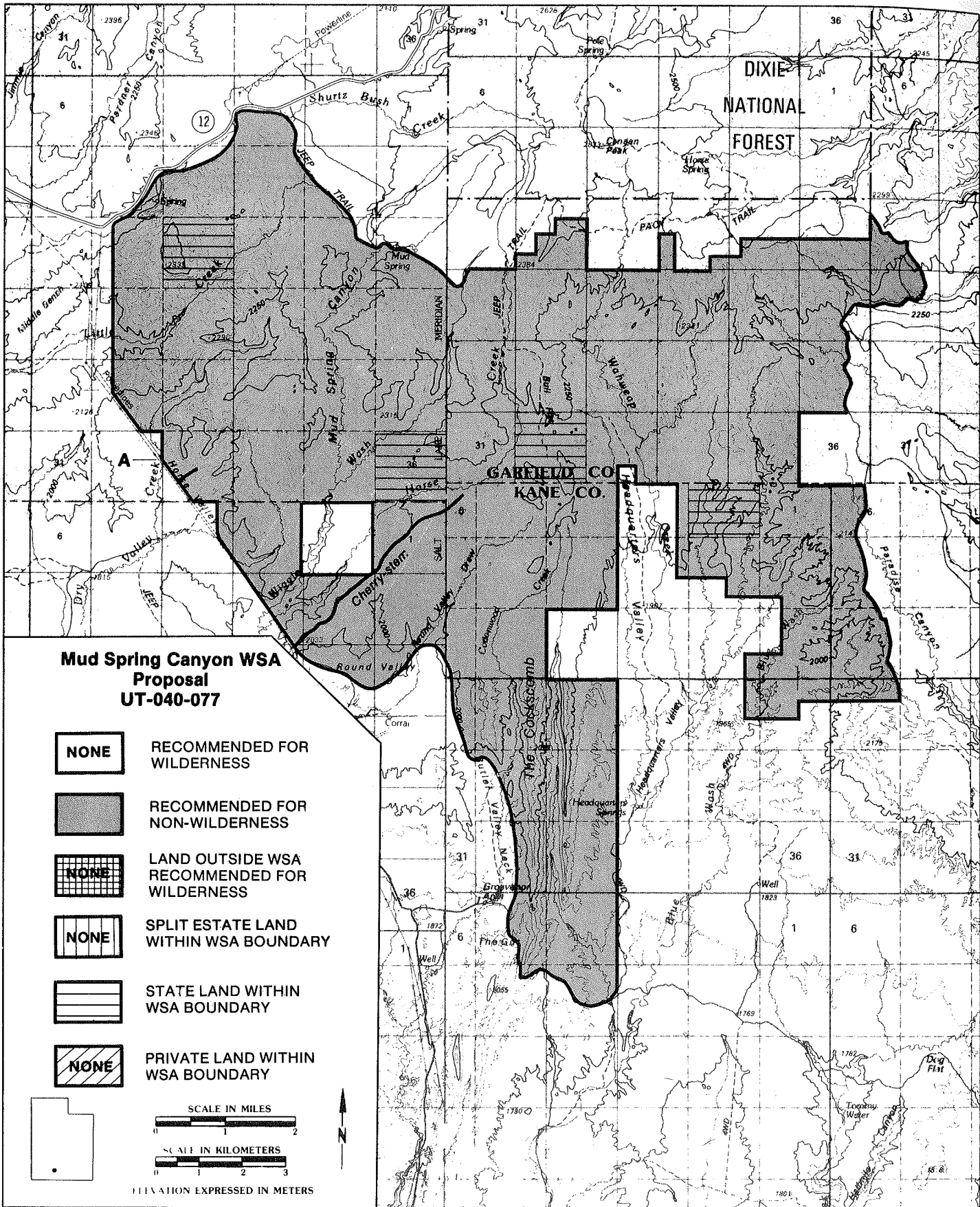
Mud Spring
Canyon WSA



MUD SPRING CANYON WSA

R. 1 W.

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MUD SPRING CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 38,075 acres

The Mud Spring Canyon Wilderness Study Area (WSA) (UT-040-077) is in south-central Garfield County and north-central Kane County, about 4 miles east of Henrieville, Utah (population 167). The WSA contains 38,075 acres of public land administered by the Bureau of Land Management (BLM) (see Map).

Approximately 22,500 acres are in Garfield County and 15,575 acres are in Kane County. The WSA is 12 miles long, from north to south, and 11 miles wide from east to west, and includes four sections (2,402 acres) of State land, but no private or split-estate lands (see Table 1). Bryce Canyon National Park is about 13 miles west of the WSA.

The WSA is bordered for about 6 miles on the northeast by the Dixie National Forest, by State Highway 12 and other roads on the northwest, secondary roads on the east, section and subsection lines on the southeast, and roads and a powerline on the west (see Map). Two State sections in the western part of the WSA are excluded from the study area because both sections are accessible from a short, unimproved road. The Blues WSA (UT-040-268) is adjacent to the northwest, separated from the Mud Spring WSA by State Highway 12.

The eastern part of the WSA is predominantly badlands composed of soft sandstones and the blue-gray Kaiparowits Formation.

TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	38,075
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	2,402
Total	40,477
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	38,075
Split-Estate	0
Total BLM land not recommended for wilderness	38,075
In-holdings (State, Private)	2,402

Source: BLM File Data

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The southern part of the WSA includes the north end of The Cockscomb, a north-south oriented ridge, prominent in south-central Utah. The western portion consists of cliffs and benches dissected by southwesterly trending drainages. Wahweap Creek drains southward for 4 miles in the central part of the WSA. The dominant vegetative type is pinyon-juniper woodland with a sparse understory.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report, and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE

0 acres

(recommended for wilderness)

38,075 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

Long-term potential for coal development outweighs the value of wilderness in the WSA. The WSA contains an estimated 270 million tons of coal, about half of which could be recovered by underground mining.

Wilderness values in the WSA are not exceptional or of generally high quality. Mud Spring Canyon WSA does not include any high quality scenery and less than half of the WSA provides outstanding opportunities for solitude and primitive recreation (47 and 38 percent, respectively). Current primitive, or nonmotorized, recreational use is estimated to be only 5 visitor days annually.

Although exploration and development of coal is not expected in the short term, in view of the long-term potential and the relatively low quality of wilderness values BLM believes that Mud Spring Canyon WSA should not be designated as wilderness. Wilderness designation would curtail mineral development.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The naturalness attributes of the WSA are considered to be very diverse with discrete areas of natural character found in the badlands of the upper Wahweap and Right Hand Collet Canyon areas, in the Cockscomb Formation, and in the escarpment of canyons and benches northwest of the Cockscomb. The criteria for naturalness are substantially met on more than 99 percent of the WSA. The only imprints of human activity are 3 miles of ways, 2.5 miles of livestock fences, seven reservoirs, and a reclaimed oil and gas exploration site. These imprints are substantially unnoticeable.

B. Solitude

About 18,000 acres (47 percent of the WSA) include terrain or vegetative screening that provides outstanding opportunities for solitude.

Solitude can be found in the badlands, The Cockscomb, and the dissected cliffs from Henrieville Creek to Horse Creek. Although the remaining 20,075 acres (53 percent) of the WSA provide opportunities for solitude, these opportunities are not comparable to the outstanding opportunities found in areas such as the badlands or The Cockscomb.

C. Primitive and Unconfined Recreation

Approximately 14,600 acres, or 38 percent of the WSA, include outstanding opportunities for primitive recreation.

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Diverse activities for which there are exceptional opportunities are hiking, backpacking, horseback riding, rock climbing, and hunting.

Opportunities for hiking and hunting exist throughout the WSA, and there are few if any parts of the WSA where these activities could not be pursued.

Rock climbing, on the other hand, is limited to the western and central portions of the WSA where there are cliffs.

The badlands, The Cockscomb, escarpments and benches in the northwest, and several canyons provide backpacking opportunities. The terrain somewhat limits riding opportunities, but several areas can be negotiated on horseback.

The remaining 23,475 acres (62 percent) of the WSA lack either the diversity of opportunities or the type of opportunity for a specific activity which would meet the standards for outstanding opportunities for primitive recreation.

D. Special Features

A waterfall on a perennial stream blocks the entrance to Dry Valley Creek Canyon, which remains in its natural condition and may be a relict ecosystem. About 200 acres are within this area, which may have important scientific values.

Peregrine falcons, an endangered species, may inhabit the WSA.

U.S. Fish and Wildlife Service (FWS) candidate threatened or endangered

animal species that may be found in the WSA include the ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, white-faced ibis, and Great Basin Silverspot butterfly. A FWS candidate plant species that may grow in the WSA is Lepidium montanum var. stellae.

Other FWS candidate plant species that may occur in the WSA are Lepidium montanum var. neeseae, Heterotheca jonesii, Coryphantha missouriensis var marstonii, and Psoralea pariensis.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. PNV is the vegetation that would develop over time if undisturbed by human interference. The WSA is in the Colorado Plateau Province/Ecoregion, and the PNV is juniper-pinyon woodland. Potential juniper-pinyon woodland is represented nationally in the NWPS, is well represented in BLM study areas both in and outside of Utah, and is represented in the Box-Death Hollow Wilderness in the Dixie National Forest in Utah. This information is summarized in Table 2 from data compiled in December 1989.

TABLE 2
ECOSYSTEM REPRESENTATION

	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
BAILEY-KUCHLER CLASSIFICATION (PNV)				
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,105,930
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,668,123

Source: BLM File Data.

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B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Provo-Orem, Utah standard metropolitan statistical area. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Mud Spring WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 64 wilderness areas comprising 2,834,115 acres in Utah and Arizona.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Provo-Orem, Utah	11	721,793	90	2,748,793

Source: BLM File Data.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north-east are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 37,300-acre Grand Wash Cliffs Wilderness (BLM), the 7,000-acre Ashdown Gorge Wilderness (FS), and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The Mud Spring Canyon WSA could be effectively managed as wilderness in the foreseeable future. There are no existing coal leases in the study area. There are 680 acres of post-FLPMA oil and gas leases in the WSA, but these leases are subject to nonimpairment of wilderness values and it is expected that they will expire and not be renewed

if the area is designated wilderness. There are no mining claims in the WSA and development of locatable minerals is not projected in the foreseeable future.

Livestock grazing and maintenance of seven livestock reservoirs and 2.5 miles of fence would continue, and would not significantly affect the wilderness values of the WSA. Maintenance of about a 0.25 mile of water pipeline in two existing rights-of-way also would not unduly reduce wilderness values in the area as a whole. There are four sections (2,402 acres) of State land inheld in the WSA. Because of the known coal resources in the WSA, it is projected that in the long term new access roads to the State land would be required through the area following wilderness designation. Additionally, any coal mining operations on the State Lands would reduce wilderness values on the adjacent wilderness.

Energy and Wilderness Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area.

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According to BLM geologists, the potential for coal resources is high. The WSA is in the Kaiparowits Known Recoverable Coal Resource Area (KRCRA). Up to 270 million tons of coal, about half of which is recoverable by underground mining, are within the WSA at depths of 1,000 to 3,000 feet beneath the surface. The coal is of moderate quality, with an average heat value of 11,000 Btus and low sulfur content. Favorability that oil and gas resources are within the WSA is low to moderate, and the degree of certainty that these exist is very low. The potential for the recovery of uranium and other metallic minerals is low. The energy potential for geothermal sources is also low. Small deposits of stream gravel and other loose rock usable in construction are in the WSA but are not economically significant because of ample supplies of similar materials elsewhere in the vicinity.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

BLM's recommendation is to release the WSA for uses other than wilderness. With implementation of the recommended action, there would be no loss of local employment or income. Opportunity to explore and develop mineral and energy resources would remain as at present. Oil and gas leasing would be open on 37,395 acres which currently are not leased, and exploration could occur. The effects on local economy would be relatively minor and temporary, however: total employment would not exceed 40 and would last about 2 years.

Coal could be leased without consideration for wilderness values. No coal mining is anticipated in the short term, but exploration and mining could occur in the next 30 years. If coal mining occurs, the effects on the local economy would be significant, but it is not possible to predict if any mines actually

would be within the WSA boundaries. Local communities would be expected to provide housing and infrastructures and some local people might be employed.

Mineral leasing would bring revenues to the Federal government and, if production of resources results, would also bring royalties. Half of these monies would be returned to the State of Utah, and a portion of that may reach local economies.

Livestock-related economic conditions would not change, because there would be no effect on livestock grazing management. Rangeland improvements are expected to increase carrying capacity for grazing by 50 percent, which would be a small but noticeable benefit to livestock permittees. Recreation-related local expenditures could increase if recreational use increases regionally and nationally for the next 30 years, as it is predicted to, but local expenditures directly attributable to use of the WSA would not be significant.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 60 inputs specifically addressing this WSA were received from 70 commenters including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 44 commenters supported wilderness designation for part or all of the WSA, while 21 commenters were opposed. Five commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

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Those favoring wilderness commented on special features in the WSA, general wilderness values, and lack of conflict with mineral values. The majority of those commenting in favor of wilderness were from outside of Utah. Of particular concern was the need to protect wilderness values from development.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development and harm local economy. Some felt that there is no need to designate more wilderness. Most of the commenters opposing wilderness were from rural Utah, but a significant number were from outside the state.

Two Federal agencies, the FS and Environmental Protection Agency (EPA) commented on the Draft EIS. The FS stated that the Dixie National Forest concurs with the recommendation to not propose wilderness in the WSA. The EPA took no formal position on wilderness designation but suggested that transportation proposals are important factors in the evaluation of the long-term coal development feasibility of the WSA.

No comment letters were received on the Final EIS.

There are two sections (2,402 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State considers the relatively low-quality wilderness values to be outweighed by the high degree of conflict associated with minerals, land treatments, and transportation corridors. The State suggests that special features be given an alternative management designation such as Research Natural Area (RNA) for Dry Valley Creek Canyon and Scenic Area designation for the Cockscomb area.

Both the Garfield and Kane County Commissions are opposed to wilderness designation of the Mud Spring Canyon WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the

Draft EIS the Counties supported BLM's no action/no wilderness proposed action.

The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs and 31,600 acres in one FS unit in the County be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the County, including the Mud Spring Canyon WSA, be retained for multiple uses.

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Table 4
Summary of Environmental Consequences

Issue Topic	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (38,075 Acres)
Impacts on Wilderness Values	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 1,048 acres and indirectly reduced in quality on up to an additional 7,900 acres due to rangeland and coal development activities. Special features would not be significantly affected.	Designation would preserve wilderness values throughout the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on about 3 acres due to rangeland projects. There would be no loss of wilderness values due to coal development.
Impacts on Vegetation	Special status plant species would not be significantly affected. The 1,048 acres of projected surface disturbance would affect less than 3 percent of the pinyon-juniper and sagebrush types in the WSA.	The vegetation resources would not be adversely affected because the area would be protected from surface disturbance.
Impacts on Mineral and Energy Exploration and Production	Mineral and energy exploration and development would not be affected because the area could be claimed, leased, and developed as at present.	Exploration or development opportunities for significant known coal resources would be precluded. Loss of exploration and development opportunities for other mineral and energy resources would not be significant.

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Table 4 (Continued)
Summary of Environmental Consequences

Resource	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (38,075 Acres)
Impacts on Wildlife Habitat and Populations	Threatened, endangered, or other special status species would not be significantly affected. Implementation of the wildlife and range-land water projects would benefit wildlife by providing additional water, forage, and ecotones.	Wilderness designation would preclude 1,000 acres of vegetation treatments and reservoirs, but would provide all species with additional opportunities for solitude.
Impacts on Livestock Management	Livestock grazing would not be adversely affected. The 1,000 acres of vegetation treatments would result in an increase of about 125 AUMs.	Vehicular use restriction on 3 miles of way would inconvenience livestock operators in the area, and increase the costs of livestock management. The opportunity for an increase of up to 125 AUMs through vegetation treatments would be foregone.
Impacts on Economic Conditions	Present local and regional economic conditions would not be significantly affected. Economic opportunities could be realized through coal exploration and eventual development in the long term. Local communities would be significantly affected.	There would not be immediate significant changes in present local or regional economic conditions. However, new leasing in the WSA would not be allowed. Therefore, potential sales and revenues for leasable minerals would be foregone. Beneficial and adverse effects from long-term development of coal would not occur. Prohibiting certain proposed rangeland developments would result in the foregoing of 125 AUMs and associated economic returns.